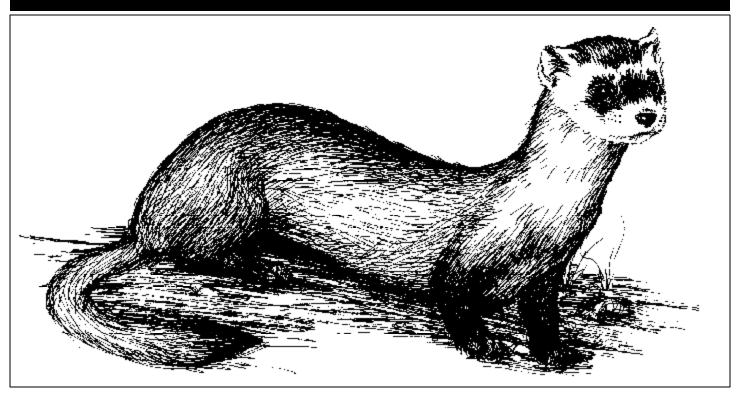
# **Black-Footed Ferret**

(Mustela nigripes)



The black-footed ferret (*Mustela nigripes*) is the only ferret native to the North American continent. Historically, fossil evidence and recorded sightings indicate that ferrets occurred in twelve states and two Canadian provinces throughout the Great Plains region. Since 1851 the majority of ferret sightings have been in Wyoming and South Dakota. Although there have been several reported sightings in Utah, the only confirmed recent sighting was near Blanding in San Juan County in the 1950s.

The black-footed ferret is a member of the weasel family, Mustelidae. In Utah, other members of the weasel family include badgers, mink, skunks, pine marten, long-and short-tailed weasels and river otters.

The demise of black-footed ferrets has been attributed to the eradication of the prairie dog, which is the primary food source for ferrets, and to habitat loss. Black-footed ferrets are now federally protected by the U.S. Endangered Species Act. They are considered the rarest mammal in North America. Until recently, the only known population of black-footed ferrets existed in captivity. Some of these animals have now been released in central Wyoming and appear to be establishing a successful wild population.

### **Description**

The black-footed ferret is a small, land dwelling carnivore (meat eater). Adults weigh from 1 to 3.5 pounds and are 19 to 24 inches long. The tail of the ferret comprises one-third of its body length. Male ferrets are generally ten percent larger than females.

The head of the black-footed ferret is large with a broad flat area between the eyes. The ears are short and round. The black-footed ferret has dark eyes surrounded by a black mask and a black nose. The name ferret comes from the Old French word "furiet" which means thief and probably refers to the ferret's black mask.

Black-footed ferrets are light tan to cream color. This fur color helps conceal the ferret by closely matching the color of the soil. The throat, face, chest, and belly are lighter in color than the middle of the back and top of the head. Males are generally lighter in color than females, and the young are usually lighter in color than the adults. The black-footed ferret's fur is lighter and shorter in the summer. In addition to the characteristic black feet, the ferret also has a black tipped tail.

Black-footed ferrets, like other members of the weasel family, have musk glands. These glands are located beneath the ferret's tail. Musk produced by these glands gives the ferret a distinctive odor. Extra musk is produced during the mating season or when the animal is frightened. Unlike their relatives the skunks, however, black-footed ferrets are unable to spray their musk. Instead, it is secreted much like sweat.

Black-footed ferrets travel in a series of jumps or a slow gallop. In this manner, the ferrets can travel at a rate of five to seven miles per hour.

The long, slender body of the black-footed ferret allows it to enter the burrows of its prey. The ferret also has short legs and five digits or "fingers" on each paw. Each "finger" has a single non-retractable claw. Ferret tracks and scat are difficult signs to identify. The ground in prairie dog towns is usually too dry and too hard to hold a track imprint. When tracks are seen, they are 12" to 16" apart and show a claw mark above each digit. Ferrets may also leave distinctive slide marks on slopes where they have been sliding. They usually defecate below ground so their scat is rarely seen.

#### **Food Habits and Habitat**

Prairie dogs make up 90% of the black-footed ferrets' diet. They also eat ground squirrels, small rodents, insects, cottontail rabbits and birds. Captive ferrets will eat fresh fish although this has never been documented in the wild.

A black-footed ferret may eat over 100 prairie dogs in one year, and it has been calculated that over 250 prairie dogs are needed to support one ferret family for one year.

When prey is plentiful, black-footed ferrets may cache their kill in a den and return to it at a later time. The overall weight and size of adult ferrets is ultimately dependent upon the quality and quantity of prey available. It is thought that the ferret gets water from its prey.

The black-footed ferrets' natural habitat coincides with most species of prairie dogs. Prairie dog towns provide the primary source of food and needed cover. Areas of short vegetation and bare ground are preferred by prairie dogs. Sagebrush shrubs are the largest plants found near preferred habitat.



Suitable habitat for prairie dogs and black-footed ferrets in Utah is in the eastern portion of the state. It includes San Juan, Daggett, Uintah, Grand, Emery and Duchesne counties. The Zuni prairie dogs are found south of the Colorado River, and the white-tailed prairie dogs are found north of the Colorado River. As such, these counties are potential sites for reintroduction projects. The ferret's habitat is not believed to have ever coincided with the endangered Utah prairie dog located in southwestern Utah.

Disease can be a significant threat to ferrets, either when it spreads through the prairie dog populations or directly attacks the ferret population. Epidemic diseases like plague may kill an entire prairie dog population, completely eliminating the ferrets' primary food source, or ferrets may directly contract diseases like canine distemper, pneumonia or tularemia (a disease of the liver). Blackfooted ferrets also are susceptible to a variety of internal nematodes, external ticks and mites.

Black-footed ferrets are preyed upon by a large number of predators, including coyotes, foxes, bobcats, owls, hawks, eagles, rattlesnakes and domestic dogs and cats.



#### **Behavior**

Black-footed ferrets are solitary and unsociable animals. Each ferret requires its own prairie dog complex to live in, except during the breeding season. It is rare for more than one adult male to live in the same prairie dog complex. Black-footed ferrets establish territories and mark them by rubbing their musk glands on rocks, vegetation and soil.

Black-footed ferrets' territories are contained within larger home ranges. Home ranges are areas where ferrets conduct their daily activities. Males tend to occupy larger home ranges than females. Black-footed ferrets may travel up to four miles each night throughout their home range in search of food and during the breeding season.

Approximately nine-tenths of a black-footed ferret's life is spent below ground. They are most active at night (nocturnal) and in the summer and fall. During the winter months, they are considerably less active, but they do not hibernate. During winter they may spend up to a week at a time below ground subsisting on cached food. Sometimes, on warm days, black-footed ferrets can be seen sunning themselves around their burrows. They may also be seen grooming themselves by biting and scratching at their coats.

Black-footed ferrets kill their prey by biting the prey on the back of the neck. Black-footed ferrets do most of their hunting inside prairie dog burrows, catching and killing prairie dogs while they sleep. The close confines of the burrows make it difficult for their prey to escape. Black-footed ferrets have poor eyesight and must rely on the smell and movement of their prey in order to attack.

Black-footed ferrets tend to chatter when they're excited or alarmed. At such times, they will emit six or seven loud chirps interrupted by low hissing sounds.

Black-footed ferrets are seldom seen in the wild because of their nocturnal underground habits. The most distinctive sign of black-footed ferrets is a dirt trench left near inhabited burrows. The ferrets make these "trenches" by holding soil against their chest with their front feet and backing out of the burrows they dig. As they do this repeatedly, they form a trench. These trenches are typically six inches wide, two to three inches deep and one to ten feet long. These are most often seen in the winter several days after a snowfall.

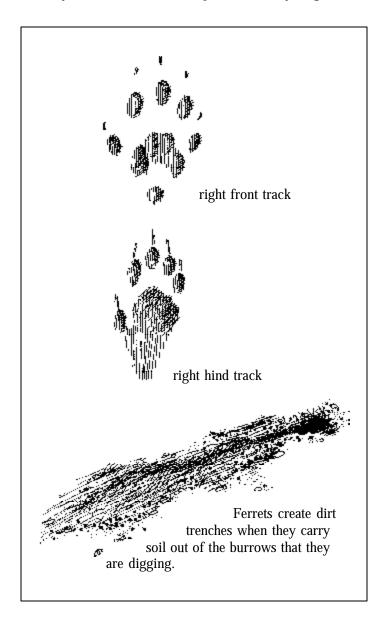
Another sign indicating the presence of black - footed ferrets may be plugged prairie dog burrows. Prairie dogs may pile soil over the openings of ferret burrows in an attempt to trap the ferret inside to protect themselves from predation by ferrets.

## Reproduction

Black-footed ferrets may live up to 10 years in captivity, but they generally live only one or two years in the wild. Fewer than half of the young ever survive to adulthood.

Breeding occurs between the months of February and March. After a 42 day gestation period, three to four young are born in the female's den. The young stay with their mothers until they are about six weeks of age. In mid-August females separate the young into different dens. By October the young are completely independent. At this time they may disperse to new areas within the prairie dog town or move to different towns.

Black-footed ferrets do not form permanent bonds. Males are polygamous and may mate with several females annually. The males do not help care for the young.



#### **Current Status**

Black-footed ferrets are protected by the Utah Wildlife Code and the federal Endangered Species Act. It is illegal to hunt, pursue, harass, catch, capture, possess, trap or kill them.

In 1978 the U.S. Fish and Wildlife Service declared the black-footed ferret extinct. Then, in 1981, a ranch dog near Meteetse, Wyoming, killed a black-footed ferret. Following this discovery, the Wyoming Game and Fish Department, the U.S. Fish and Wildlife Service and several private organizations made plans to try to reestablish black-footed ferrets in the west.

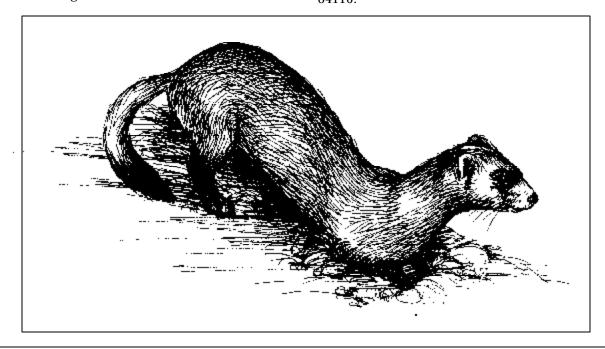
The Wyoming population of black-footed ferrets was carefully monitored and managed, and in 1984, the Meteetse population reached a high of 129 individuals. Shortly thereafter, an epidemic of plague and an outbreak of canine distemper nearly eradicated the population. Biologists, in an attempt to save the ferret, decided to capture the remaining population. By this time only 18 animals remained. These ferrets were able to successfully breed in captivity, and breeding adults were relased to the wild. Now there are approximately 450 ferrets located at several captive breeding facilities in Wheatland, Wyoming; Front Royal, Virginia; Omaha, Nebraska; Phoenix, Arizona; and Colorado Springs, Colorado.

The Utah Division of Wildlife Resources, U.S. Bureau of Land Management and U.S. Fish and Wildlife

Service are presently working towards reintroducing ferrets in Utah. The site for this plan is Coyote Basin in northeastern Utah. After a management plan has been written by biologists, the proposal will be open to public comment. If the proposal is accepted, the Division of Wild-life Resources may begin reintroducing ferrets into their historic Utah range.

#### What You Can Do

- If you are reasonably certain that you have seen a black-footed ferret, contact the Utah Division of Wildlife Resources. Biologists from the Utah Division of Wildlife Resources investigate all reported sightings of black-footed ferrets.
- If a black-footed ferret is found dead or wounded, do not handle it. Wounded ferrets will bite. A dead ferret may have disease-bearing fleas on its body. Contact your local Division of Wildlife Resources regional office and inform them of the discovery. Try to keep domestic pets away from the animal and caution other people not to handle the ferret. A Wildlife Conservation Officer will arrive to take care of the animal.
- You can contribute to wildlife through the Wildlife Tax Check-off on the Utah State Income Tax forms or by making a contribution to the Watchable Wildlife Program, Utah Division of Wildlife Resources, 1594 West North Temple, Suite 2110, Salt Lake City, UT 84116.



Wildlife Notebook Series No. 8 written by Utah State University Wildlife Management students Greg Brown, Mike Jensen and Janene Shupe; reviewed by Jordan Pederson, Regional Supervisor, Central Region; edited by Brenda Schussman; and illustrated by Jill Rensel. (Images may not be reproduced)

